

Attorney Docket No. 47237-5022  
Application No.: 10/562,716  
Response to Office Action mailed: October 15, 2008  
Response dated: December 12, 2008

**AMENDMENTS TO THE CLAIMS**

Please replace all prior listings of the claims with the following:

**IN THE CLAIMS:**

Claim 1. (Original) A preventive or ameliorating agent for liver diseases associated with hepatopathy comprising an omega-9 unsaturated fatty acid or a compound having an omega-9 unsaturated fatty acid as a constituent fatty acid.

Claim 2. (Original) The preventive or ameliorating agent for liver diseases associated with hepatopathy according to claim 1 wherein said compound having an omega-9 unsaturated fatty acid as a constituent fatty acid is an alcohol ester of an omega-9 unsaturated fatty acid, a monoglyceride, a diglyceride and/or a triglyceride, or a phospholipid having an omega-9 unsaturated fatty acid as a constituent fatty acid.

Claim 3. (Original) The preventive or ameliorating agent for liver diseases associated with hepatopathy according to claim 2 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid contains 20% or more of the omega-9 unsaturated fatty acid relative to the total fatty acids constituting said triglyceride.

Claim 4. (Previously Presented) The preventive or ameliorating agent for liver diseases associated with hepatopathy according to claim 1 wherein said omega-9 unsaturated fatty acid is at least one selected from the group consisting of 6,9-octadecadienoic acid (18:2 ω9), 8,11-eicosadienoic acid (20:2 ω9) and 5,8,11-eicosatrienoic acid (20:3 ω9).

Claim 5. (Previously Presented) The preventive or ameliorating agent for liver diseases associated with hepatopathy according to claim 1 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid is obtained by culturing a microorganism having a reduced or absent Δ12 unsaturating enzyme activity in a medium, said

Attorney Docket No. 47237-5022

Application No.: 10/562,716

Response to Office Action mailed: October 15, 2008

Response dated: December 12, 2008

microorganism being obtained by the mutation treatment of a microorganism belonging to genus Mortierella, genus Conidiobolus, genus Phythium, genus Phytophthora, genus Penicillium, genus Cladosporium, genus Mucor, genus Fusarium, genus Aspergillus, genus Rhodotorula, genus Entomophthora, genus Echinosporangium, or genus Saprolegnia and being capable of producing arachidonic acid, and then extracting from said culture.

Claim 6. (Previously Presented) The preventive or ameliorating agent according to claim 1 wherein said liver diseases associated with hepatopathy are acute or chronic hepatitis.

Claim 7. (Previously Presented) The preventive or ameliorating agent according to claim 1 wherein said liver diseases associated with hepatopathy are acute hepatic insufficiency, liver cirrhosis and/or hepatoma.

Claim 8. (Original) A composition or a food or drink having an effect of preventing or ameliorating liver diseases associated with hepatopathy comprising an omega-9 unsaturated fatty acid or a compound having an omega-9 unsaturated fatty acid as a constituent fatty acid.

Claim 9. (Original) The composition or the food or drink having an effect of preventing or ameliorating liver diseases associated with hepatopathy according to claim 8 wherein said compound having an omega-9 unsaturated fatty acid as a constituent fatty acid is an alcohol ester of an omega-9 unsaturated fatty acid, a monoglyceride, a diglyceride and/or a triglyceride, or a phospholipid having an omega-9 unsaturated fatty acid as a constituent fatty acid.

Claim 10. (Original) The composition or the food or drink having an effect of preventing or ameliorating liver diseases associated with hepatopathy according to claim 9 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid

Attorney Docket No. 47237-5022

Application No.: 10/562,716

Response to Office Action mailed: October 15, 2008

Response dated: December 12, 2008

contains 20% or more of the omega-9 unsaturated fatty acid relative to the total fatty acids constituting said triglyceride.

Claim 11. (Previously Presented) The composition or the food or drink having an effect of preventing or ameliorating liver diseases associated with hepatopathy according to claim 8 wherein said omega-9 unsaturated fatty acid is at least one selected from the group consisting of 6,9-octadecadienoic acid (18:2 ω9), 8,11-eicosadienoic acid (20:2 ω9) and 5,8,11-eicosatrienoic acid (20:3 ω9).

Claim 12. (Previously Presented) The composition or the food or drink having an effect of preventing or ameliorating liver diseases associated with hepatopathy according to claim 8 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid is obtained by culturing a microorganism having a reduced or absent Δ12 unsaturating enzyme activity in a medium, said microorganism being obtained by the mutation treatment of a microorganism belonging to genus Mortierella, genus Conidiobolus, genus Phythium, genus Phytophthora, genus Penicillium, genus Cladosporium, genus Mucor, genus Fusarium, genus Aspergillus, genus Rhodotorula, genus Entomophthora, genus Echinosporangium, or genus Saprolegnia and being capable of producing arachidonic acid, and then extracting it from said culture.

Claim 13. (Previously Presented) The composition or the food or drink having a preventing or ameliorating effect according to claim 8 wherein said liver diseases associated with hepatopathy are acute or chronic hepatitis.

Claim 14. (Previously Presented) The composition or the food or drink having a preventing or ameliorating effect according to claim 8 wherein said liver diseases associated with hepatopathy are acute hepatic insufficiency, liver cirrhosis and/or hepatoma.

Attorney Docket No. 47237-5022

Application No.: 10/562,716

Response to Office Action mailed: October 15, 2008

Response dated: December 12, 2008

Claim 15. (Previously Presented) The composition or the food or drink having an effect of preventing or ameliorating liver diseases associated with hepatopathy according to claim 8 wherein said a food or drink are functional foods, nutrient supplements, specified health foods or foods for old people.

Claim 16. (Currently Amended) A method of preparing ~~ingest having an effect of preventing or ameliorating liver diseases associated with hepatopathy~~ the composition or food or drink having an effect of preventing or ameliorating liver diseases associated with hepatopathy according to claim 8, wherein an omega-9 unsaturated fatty acid or a compound having an omega-9 unsaturated fatty acid as a constituent fatty acid is blended with a raw material for a food or drink containing substantially no or very little omega-9 unsaturated fatty acid.

Claim 17. (Original) A method of preventing or ameliorating liver diseases associated with hepatopathy wherein an omega-9 unsaturated fatty acid or a compound having an omega-9 unsaturated fatty acid as a constituent fatty acid is administered to a subject.

Claim 18. (Original) The method according to claim 17 wherein said compound having an omega-9 unsaturated fatty acid as a constituent fatty acid is an alcohol ester of an omega-9 unsaturated fatty acid, a monoglyceride, a diglyceride and/or a triglyceride, or a phospholipid having an omega-9 unsaturated fatty acid as a constituent fatty acid.

Claim 19. (Original) The method according to claim 18 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid contains 20% or more of the omega-9 unsaturated fatty acid relative to the total fatty acids constituting said triglyceride.

Claim 20. (Previously Presented) The method according to claim 17 wherein said omega-9 unsaturated fatty acid is at least one selected from the group consisting of 6,9-octadecadienoic acid (18:2 ω9), 8,11-eicosadienoic acid (20:2 ω9) and 5,8,11-eicosatrienoic acid (20:3 ω9).

Attorney Docket No. 47237-5022

Application No.: 10/562,716

Response to Office Action mailed: October 15, 2008

Response dated: December 12, 2008

Claim 21. (Previously Presented) The method according to claim 17 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid is obtained by culturing a microorganism having a reduced or absent  $\Delta 12$  unsaturating enzyme activity in a medium, said microorganism being obtained by the mutation treatment of a microorganism belonging to genus Mortierella, genus Conidiobolus, genus Phythium, genus Phytophthora, genus Penicillium, genus Cladosporium, genus Mucor, genus Fusarium, genus Aspergillus, genus Rhodotorula, genus Entomophthora, genus Echinoporangium, or genus Saprolegnia and being capable of producing arachidonic acid, and then extracting from said culture.

Claim 22. (Previously Presented) The method according to claim 17 wherein said liver diseases associated with hepatopathy are acute or chronic hepatitis.

Claim 23. (Previously Presented) The method according to claim 17 wherein said liver diseases associated with hepatopathy are acute hepatic insufficiency, liver cirrhosis and/or hepatoma.

Claim 24. (Original) A method of preventing or ameliorating liver diseases associated with hepatopathy which comprises providing a composition or a food or drink containing an omega-9 unsaturated fatty acid or a compound having an omega-9 unsaturated fatty acid as a constituent fatty acid.

Claim 25. (Original) The method according to claim 24 wherein said compound having an omega-9 unsaturated fatty acid as a constituent fatty acid is an alcohol ester of an omega-9 unsaturated fatty acid, a monoglyceride, a diglyceride and/or a triglyceride, or a phospholipid having an omega-9 unsaturated fatty acid as a constituent fatty acid.

Attorney Docket No. 47237-5022

Application No.: 10/562,716

Response to Office Action mailed: October 15, 2008

Response dated: December 12, 2008

Claim 26. (Original) The method according to claim 25 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid contains 20% or more of the omega-9 unsaturated fatty acid relative to the total fatty acids constituting said triglyceride.

Claim 27. (Previously Presented) The method according to claim 24 wherein said omega-9 unsaturated fatty acid is at least one selected from the group consisting of 6,9-octadecadienoic acid (18:2 ω9), 8,11-eicosadienoic acid (20:2 ω9) and 5,8,11-eicosatrienoic acid (20:3 ω9).

Claim 28. (Previously Presented) The method according to claim 24 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid is obtained by culturing a microorganism having a reduced or absent Δ12 unsaturating enzyme activity in a medium, said microorganism being obtained by the mutation treatment of a microorganism belonging to genus Mortierella, genus Conidiobolus, genus Phythium, genus Phytophthora, genus Penicillium, genus Cladosporium, genus Mucor, genus Fusarium, genus Aspergillus, genus Rhodotorula, genus Entomophthora, genus Echinoporangium, or genus Saprolegnia and being capable of producing arachidonic acid, and then extracting it from said culture.

Claim 29. (Currently Amended) The method according to claim [[1]] 24 wherein said liver diseases associated with hepatopathy are acute or chronic hepatitis.

Claim 30. (Previously Presented) The method according to claim 24 wherein said liver diseases associated with hepatopathy are acute hepatic insufficiency, liver cirrhosis and/or hepatoma.

Claim 31. (Previously Presented) The method according to claim 24 wherein said a food or drink are functional foods, nutrient supplements, specified health foods or foods for old people.

Attorney Docket No. 47237-5022

Application No.: 10/562,716

Response to Office Action mailed: October 15, 2008

Response dated: December 12, 2008

Claim 32. (Original) A use of an omega-9 unsaturated fatty acid or a compound having an omega-9 unsaturated fatty acid as a constituent fatty acid for the preparation of a preventive or ameliorating agent for liver diseases associated with hepatopathy.

Claim 33. (Original) The use according to claim 32 wherein said compound having an omega-9 unsaturated fatty acid as a constituent fatty acid is an alcohol ester of an omega-9 unsaturated fatty acid, a monoglyceride, a diglyceride and/or a triglyceride, or a phospholipid having an omega-9 unsaturated fatty acid as a constituent fatty acid.

Claim 34. (Original) The use according to claim 33 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid contains 20% or more of the omega-9 unsaturated fatty acid relative to the total fatty acids constituting said triglyceride.

Claim 35. (Previously Presented) The use according to claim 32 wherein said omega-9 unsaturated fatty acid is at least one selected from the group consisting of 6,9-octadecadienoic acid (18:2 ω9), 8,11-eicosadienoic acid (20:2 ω9) and 5,8,11-eicosatrienoic acid (20:3 ω9).

Claim 36. (Previously Presented) The use according to claim 32 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid is obtained by culturing a microorganism having a reduced or absent Δ12 unsaturating enzyme activity in a medium, said microorganism being obtained by the mutation treatment of a microorganism belonging to genus Mortierella, genus Conidiobolus, genus Phythium, genus Phytophthora, genus Penicillium, genus Cladosporium, genus Mucor, genus Fusarium, genus Aspergillus, genus Rhodotorula, genus Entomophthora, genus Echinosporangium, or genus Saprolegnia and being capable of producing arachidonic acid, and then extracting it from said culture.

Claim 37. (Previously Presented) The use according to claim 32 wherein said liver diseases associated with hepatopathy are acute or chronic hepatitis.

Attorney Docket No. 47237-5022

Application No.: 10/562,716

Response to Office Action mailed: October 15, 2008

Response dated: December 12, 2008

Claim 38. (Previously Presented) The use according to claim 32 wherein said liver diseases associated with hepatopathy are acute hepatic insufficiency, liver cirrhosis and/or hepatoma.

Claim 39. (Original) The use of an omega-9 unsaturated fatty acid or a compound having an omega-9 unsaturated fatty acid as a constituent fatty acid for the preparation of a composition or a food or drink having an effect of preventing or ameliorating liver diseases associated with hepatopathy.

Claim 40. (Original) The use according to claim 39 wherein said compound having an omega-9 unsaturated fatty acid as a constituent fatty acid is an alcohol ester of an omega-9 unsaturated fatty acid, a monoglyceride, a diglyceride and/or a triglyceride, or a phospholipid having an omega-9 unsaturated fatty acid as a constituent fatty acid.

Claim 41. (Original) The use according to claim 40 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid contains 20% or more of the omega-9 unsaturated fatty acid relative to the total fatty acids constituting said triglyceride.

Claim 42. (Previously Presented) The use according to claim 39 wherein said omega-9 unsaturated fatty acid is at least one selected from the group consisting of 6,9-octadecadienoic acid (18:2 ω9), 8,11-eicosadienoic acid (20:2 ω9) and 5,8,11-eicosatrienoic acid (20:3 ω9).

Claim 43. (Previously Presented) The use according to claim 39 wherein said triglyceride having an omega-9 unsaturated fatty acid as a constituent fatty acid is obtained by culturing a microorganism having a reduced or absent Δ12 unsaturating enzyme activity in a medium, said microorganism being obtained by the mutation treatment of a microorganism belonging to genus Mortierella, genus Conidiobolus, genus Phythium, genus Phytophthora,

Attorney Docket No. 47237-5022  
Application No.: 10/562,716  
Response to Office Action mailed: October 15, 2008  
Response dated: December 12, 2008

genus Penicillium, genus Cladosporium, genus Mucor, genus Fusarium, genus Aspergillus, genus Rhodotorula, genus Entomophthora, genus Echinosporangium, or genus Saprolegnia and being capable of producing arachidonic acid, and then extracting it from said culture.

Claim 44. (Previously Presented) The use according to claim 39 wherein said liver diseases associated with hepatopathy are acute or chronic hepatitis.

Claim 45. (Previously Presented) The use according to claim 39 wherein said liver diseases associated with hepatopathy are acute hepatic insufficiency, liver cirrhosis and/or hepatoma.

Claim 46. (Previously Presented) The use according to claim 39 wherein said a food or drink are functional foods, nutrient supplements, specified health foods or foods for old people.